REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the above amendments and the following remarks.

Claims 12-15, 17, and 22 have been amended, and claim 16 has been canceled. Support for the amendments is provided for example in Fig. 8 and paragraphs [0053]-[0076] and [0089]-[0095] of the published specification. The amendments were not presented earlier due to the unforeseeability of the remarks presented in the Final Rejection. (It should be noted that references herein to the specification and drawings are for illustrative purposes only and are not intended to limit the scope of the invention to the referenced embodiments.)

Claims 12-15, 17, 18, 21, and 22 were rejected, under 35 USC §103(a), as being unpatentable over Perrett et al. (US 6,018,275) in view of Johansson et al. (Linearization of Multi-Carrier Power Amplifiers, Vehicular Technology Conference, 1993 IEEE 43rd, 18-20 May 1993, pages 684-687). To the extent that these rejections may be deemed applicable to the amended claims presented herein, the Applicants respectfully traverse based on the points set forth below.

Claim 12 now defines a modulation apparatus that finds a phase distortion between a first baseband phase signal and a second baseband phase signal and finds a constant using the phase distortion; the constant is used to compensate phase distortion with respect to the first baseband phase signal. The claimed subject matter provides an advantage of compensating a baseband signal for phase distortion before modulating the baseband signal (see specification page 9, line 20, through page 10, line 3).

It is submitted that Johansson does not disclose finding a constant in the process of mixing a feedback signal and a local oscillator (LO) signal and adding the mixed signal to an I signal and Q signal (see Johansson Fig. 3 and pages 684-686). The subject matter of Applicants' claim 12 distinguishes over Johansson's disclosure in that claim 12 finds a constant using phase distortion found based on a first baseband phase signal and a second baseband phase signal, which is generated by demodulating the first baseband phase signal. Perrett is not cited in the Final Rejection for supplementing the teachings of Johansson in this regard.

Consequently, the Applicants' claimed invention provides advantages of finding an accurate constant by finding a constant using phase distortion between a first baseband phase signal and a second baseband phase signal, compensating another phase distortion very precisely, and using a memory of a small storage capacity because a constant does not need to be stored in advance.

Accordingly, the Applicants submit that even if Perrett and Johansson, were combined as proposed in the Office action, the result would lack the above-noted subject matter of claim 12, and thus these references, whether considered individually or in combination, do not render obvious claim 12. Independent claim 22 similarly recites the above-mentioned subject matter distinguishing apparatus claim 12 from the applied references, but with respect to a method. Therefore, allowance of claims 12 and 22 and all claims dependent therefrom is considered to be warranted.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

/James Edward Ledbetter/

Date: October 20, 2009
JEL/DWW/att

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